

Barbara Worgess
Department Director
Robert Maglievaz
Manager

**ROOM ADDITION/REMODEL/REPLACEMENT/RESIZE
PROCEDURES FOR ADDITIONAL FLOWS**

Approval must be obtained from the Environmental Services for any proposed building addition, remodel or home replacement project that results in an increased daily flow for the onsite wastewater system. Staff will review the proposed addition to determine if the existing system is adequate to handle the increased flow or if modifications will be necessary.

A **ROOM ADDITION, REMODEL OR HOME REPLACEMENT PROJECT** includes the following:

1. Adding a structure to the existing home.
2. Remodeling the interior of the home.
3. Building or replacing a new structure or residence and utilizing the existing septic system.

ROOM ADDITION/ REPLACEMENT/REMODEL REVIEW REQUIREMENTS:

1. A completed application with the required \$250 fee (includes a file search & review).
2. Two sets of floor plans of the existing home and proposed addition(s). (include all plumbing fixtures)
3. Two sets of the site plan showing the location of all existing structures, layout of the existing wastewater system, and all set-back requirements displayed, and the location of the proposed addition (see attached Plot Plan Example).
4. A completed Plot Plan Checklist (page 3)

IF A SYSTEM IS PERMITTED:

1. The district inspector will pull the original paperwork.
2. Flows will be calculated to determine if the existing system is adequate.
3. If there are additional requirements needed for the system, a site investigation may be required. If limiting site conditions are discovered, the system may need to be modified and the applicant will need to apply for a new permit and follow the permitting process.

IF A SYSTEM IS NOT PERMITTED (OR HAS BEEN GIVEN PERMIT, BUT NOT APPROVED/INSPECTED OR LOCATED IN OUR FILES):

1. Partial uncovering of the system will be required to verify size. There will be an inspection fee of \$80.
 - a. Septic tank top must be uncovered and pumped prior to inspection (receipts must be turned in to the inspector).
 - b. The beginnings and ends of all leach lines must be uncovered prior to inspection.
 - c. A test hole must be dug immediately next to one leach line to determine the depth of the leach rock.
 - d. Two ramped test holes must be dug at least 10 feet away from the existing system in the area where the system addition will be added. The test holes must be dug as deep as the backhoe can excavate.
2. Flows will be calculated to determine if the existing system is adequate.
3. If there are additional requirements needed for the system, the applicant will need to apply for a new permit and follow the permit process.
4. Please consult with inspector prior to uncovering the system for applicable and specific requirements.

ONCE THE SUBMITTAL IS COMPLETE, PLEASE ALLOW **10** WORKING DAYS TO REVIEW THE APPLICATION. ONCE FINAL APPROVAL HAS BEEN GRANTED, AN APPROVAL FORM WILL BE SENT TO BOTH THE HOME-OWNER AND TO COMMUNITY DEVELOPMENT.



Revised 6/04

COCONINO COUNTY
HEALTH DEPARTMENT
ENVIRONMENTAL QUALITY

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Robert Maglievaz
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Date Entered

APPLICATION FOR APPROVAL FOR A
ROOM ADDITION, REPLACEMENT, RESIZE OR
REMODEL

FEES

- ☐ ROOM ADDITION/REPLACEMENT OR REMODEL = \$ 250.00
- ☐ RESIZE SYSTEM \$ 250.00

FEE PAID: _____

DATE: _____

RECEIPT # _____

SUBDIVISION: _____ UNIT # _____ LOT # _____

ASSESSOR'S PARCEL # _____

HOME OWNER/AUTHORIZED AGENT: _____ PHONE/FAX # _____

ADDRESS: _____ CITY/STATE/ZIP _____ / _____ / _____

CONTACT (if different than above): _____ PHONE/FAX # _____

ADDRESS: _____ CITY/STATE/ZIP _____ / _____ / _____

PROPOSED ATTACHED OR DETACHED ADDITIONS:

_____ BEDROOM _____ LIVING ROOM

_____ BATHROOM _____ GARAGE/WORKSHOP/BARN (PLEASE CIRCLE ONE)

_____ DEN/OFFICE _____ OTHER (DESCRIBE) _____

_____ REPLACEMENT OF A _____ BEDROOM MOBILE HOME WITH A _____ BEDROOM MOBILE HOME/HOUSE.

DESCRIBE ADDITION(S): _____

LIST PLUMBING FIXTURES PROPOSED: _____

LIST SIZE OF EACH PROPOSED ADDITION: _____

EXISTING PERMIT # _____

PRINT NAME

SIGNATURE

DATE



COCONINO COUNTY HEALTH DEPARTMENT

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PLOT PLAN CHECKLIST FOR STANDARD SYSTEMS

NAME: _____ PHONE # _____

SUBDIVISION/PARCEL# _____

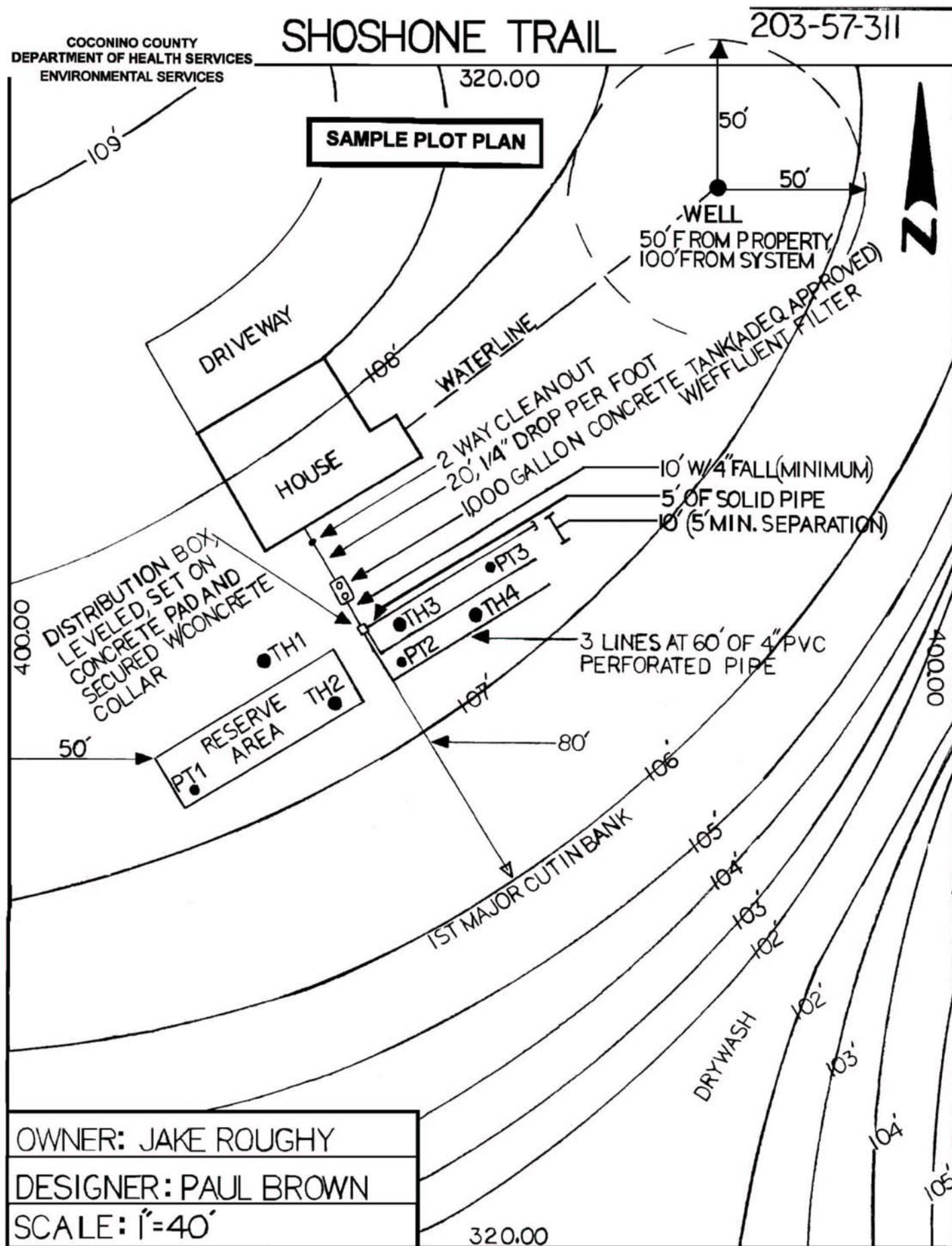
DIRECTIONS: The following checklist includes all the items necessary for properly completing the plot plan. Please include all of the items to your plot plan that apply. If your plot plan submittal does not comply with the requirements of the general permit or other applicable requirements of Article 3 (Aquifer Protection Permits), you will receive a written request for additional information. See the Plot Plan Example on Page 9 for guidance.

#	Yes	No	GENERAL INFORMATION
1.	<input type="checkbox"/>	<input type="checkbox"/>	All property dimensions, names of streets, roadways and easements.
2.	<input type="checkbox"/>	<input type="checkbox"/>	Scale needs to be either 1" = 20' for 1 acre or less. 1" = 40' for more than 1 acre.
3.	<input type="checkbox"/>	<input type="checkbox"/>	Direction of North.
4.	<input type="checkbox"/>	<input type="checkbox"/>	Owners name, designer's name, assessor's parcel #, subdivision, and lot #.
5.	<input type="checkbox"/>	<input type="checkbox"/>	Property size in acres.
6.	<input type="checkbox"/>	<input type="checkbox"/>	Location & dimensions of all proposed & existing structures (including decks, patios, & driveways).
7.	<input type="checkbox"/>	<input type="checkbox"/>	Location of wells, water lines, & bodies of water (include wells within 100' of neighboring properties).
8.	<input type="checkbox"/>	<input type="checkbox"/>	Distance to cuts, slopes, dry washes & drainage easements greater than 25' from system or reserve area.
9.	<input type="checkbox"/>	<input type="checkbox"/>	Topography, showing appropriate contour intervals, with original and post installation grades.
10.	<input type="checkbox"/>	<input type="checkbox"/>	Lot features such as hills, valleys, and gullies.
11.	<input type="checkbox"/>	<input type="checkbox"/>	Location of all test holes that were inspected on property.
12.	<input type="checkbox"/>	<input type="checkbox"/>	Location of percolation test(s). (if they were required)
#	Yes	No	SYSTEM DIMENSIONS:
13.	<input type="checkbox"/>	<input type="checkbox"/>	Building sewer line length & slope (min. length is 10' & max. length is 100', w/ 1/4" per ft. fall).
14.	<input type="checkbox"/>	<input type="checkbox"/>	Two-way clean-out(s) location in the building sewer line. (1 @ dwelling, 1 every 50', 1 @ any bend greater than 45 degrees).
15.	<input type="checkbox"/>	<input type="checkbox"/>	Septic tank size, material, and tank manufacturer (must be ADEQ approved).
16.	<input type="checkbox"/>	<input type="checkbox"/>	Septic tank effluent filter (assure that it prevents passage of solids > 1/8", corrosion & erosion resistant)
17.	<input type="checkbox"/>	<input type="checkbox"/>	Septic tank risers over inlet & outlet (and over center when applicable).
18.	<input type="checkbox"/>	<input type="checkbox"/>	Outlet line length, type, & slope, (4" PVC, min. length 6' & min. slope is 4").
19.	<input type="checkbox"/>	<input type="checkbox"/>	Distribution method: <input type="checkbox"/> Distribution Box (D-box), required for 3 lines or more. D-box must be leveled w/ water (have water available for final inspection), must be set on a concrete pad & stabilized with a concrete collar. <input type="checkbox"/> Level Manifold Line, two lines required. Indicate stabilization method.
20.	<input type="checkbox"/>	<input type="checkbox"/>	Leach line/chamber lengths and number of lines. All lines must be the same length to provide equal distribution. (Lines cannot exceed 100', must be level & capped at each end, and have inspection ports).
21.	<input type="checkbox"/>	<input type="checkbox"/>	Distance between distribution pipe. (2x the effective depth, or 5 feet, whichever is greater).
22.	<input type="checkbox"/>	<input type="checkbox"/>	Location of reserve area. Reserve area must be equal in size to the disposal field in area of one test hole.
23.	<input type="checkbox"/>	<input type="checkbox"/>	Provide a cross-section of your proposed leach trench, or chamber showing the inspection pipe, effective area, trench width, and total-trench depth etc. (use pages 7 & 8 for guidance).
24.	<input type="checkbox"/>	<input type="checkbox"/>	Include all minimum setback requirements that apply (see page 5).

FOR DEPARTMENT USE ONLY

☐ APPROVED ☐ NOT APPROVED DATE: _____ ENV. SPECIALIST _____

COMMENTS: _____



COCONINO COUNTY
HEALTH DEPARTMENT
ENVIRONMENTAL QUALITY

CUSTOMER COPY OF
SETBACK REQUIREMENTS R18-9-A312(C)

FEATURE OF POTENTIAL IMPACT	SETBACK DISTANCE (FEET)	
	SEPTIC TANK	DISPOSAL TRENCH, BED, OR SEEPAGE PIT
Building (1)	10	10
Property line shared with adjoining land not served by a common drinking water system or an existing well (2)	50	50
All other property lines	5	5
Water supply well (public or private)	100	100
Perennial or intermittent stream (3)	100	100
Lake or reservoir (4)	100	100
Drinking water intake from a surface water source (includes an open water body, downgrade spring or a well tapping streamside saturated alluvium)	200	200
Drainage easement or wash with drainage area more than five acres (5)	50	50
Water main or branch water line well tapping streamside saturated alluvium)	10	10
Domestic service water line (6)	5	5
Downslope cut banks and culvert or roadway ditches (7)	15	15
Driveway (8)	5	5
Swimming pool (9)	5	5
Easement (except drainage easement)	5	5

Notes:

- (1) Includes porches, decks, and steps (covered or uncovered), breezeways, roofed patios, carports, covered walks and driveways, and similar structures and appurtenances.
- (2) A common drinking water system is a system that currently serves or is under legal obligation to serve the property and may include a drinking water utility, a well sharing agreement, or other viable water supply agreement. A setback may be reduced to a minimum of five feet from the property line if:
 - a. The owners of any affected undeveloped adjacent properties agree by an appropriate written document to limit the location of any new well on their property to at least 100 feet from the proposed septic tank and primary and reserve disposal field areas; and
 - b. The arrangements and documentation are approved by the Department.
- (3) Measured from the limit of peak stream flow from a 10-year, 24-hour rainfall event.
- (4) Measured from the high water line from a 10-year, 24-hour rainfall event at the lake or reservoir.
- (5) Measured from the nearest edge of the defined natural channel bank or drainage easement whichever is less. A setback may be reduced to 25 feet if natural or constructed erosion protection is approved by the appropriate flood plain administrator.
- (6) The water line separation from sewer lines shall be as follows:
 - a. A water line crossing a sewer line at an angle of 45 to 90 degrees shall be one foot above the sewer line.
 - b. A water line crossing a sewer line at an angle of less than 45 degrees is not allowed.
 - c. A water line that is one to three feet from a sewer line but does not cross the sewer line shall be one foot above the sewer line and may be on a bench in the same trench or in a separate trench.
 - d. A water line that is less than one foot from a sewer line but does not cross the sewer line is not allowed.
- (7) Measured to the top of the cut bank or ditch or to the nearest sidewall of the culvert. The setback to a disposal trench, bed, or seepage pit is 15 feet or four times the elevation difference between the finished grade of the disposal trench, bed, or seepage pit and the elevation at the cut bank bottom, ditch bottom, or culvert invert, whichever is greater, up to 50 feet.
- (8) Measured to the nearest edge of septic tank excavation. A properly reinforced septic tank and cover may be placed at any location relative to a driveway if access openings, risers, and covers carry the design load and are protected from inflow.
- (9) A setback may be increased due to soil loading and stability concerns.



COCONINO COUNTY HEALTH DEPARTMENT

ENVIRONMENTAL QUALITY

SYSTEM DESIGN FLOW FORM

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Manager

Use the fixture count chart below to determine the total number of fixture units in your home. Check the corresponding box on the system design flow chart based on your fixture count and the number of bedrooms to determine the system design flow that is required. Enter the information at the bottom of the page,

FIXTURE COUNT CHART					
Residential Fixture Type	Proposed # of Each Fixture Type		Fixture Units	=	Total # of Fixtures For Each Type
Bathtub			2	=	
Bidet		x	2	=	
Dishwasher, service		x	2	=	
Clothes washer (with or without laundry tub)		x	2	=	
Utility tub or sink separate from clothes washer		x	2	=	
Sink, kitchen (with or without dish washer)		x	2	=	
Shower, single stall		x	2	=	
Sink, bar		x	1	=	
Sink, service		x	3	=	
Lavatory, single or double		x	1	=	
*Toilet, 1.6 gallons per flush (gpf)		x	3	=	
Toilet, >1.6 to 3.2 gpf		x	4		
Toilet, greater than 3.2 gpf		x	6	=	
FIXTURE COUNT TOTAL				=	
PHYSICAL NO. OF BEDROOMS					
<p>* To receive credit for toilet of 1.6 gallons per flush, obtain the Low Flush Affidavit Form at our front desk. Complete and submit with this packet. Credit will not be issued without a notarized Low Flush Affidavit Form.</p>					
SYSTEM DESIGN FLOW CHART					
✓	No. of Bedrooms*	Fixture Count	Minimum Tank Size (gallons)	System Design Flow (gpd)	
<input type="checkbox"/>	2-3	21 or less more than 21	1000 1250	450 600	
<input type="checkbox"/>	4	28 or less more than 28	1250 1500	600 750	
<input type="checkbox"/>	5	35 or less more than 35	1500 2000	750 900	
<input type="checkbox"/>	6	41 or less more than 41	2000 2000	900 1050	
<input type="checkbox"/>	7	45 or less more than 45	2000 2500	1050 1200	
<p>NOTE: For a single residence with more than 7 bedrooms, use R18-9-A314(D)(2) as the basis for determining minimum septic tank size and system design flow.</p>					